

PATENT

- 3 -

## REVISED LISTING OF CLAIMS:

1. (Cancelled) A method of making an adhesive binder strip having a reduced transverse curl, said method comprising:

providing an elongated substrate having a longitudinal axis and transverse axis normal to the longitudinal axis;

applying a layer of molten, heated-activated adhesive over a surface of the substrate;

cooling the layer of molten adhesive so that the layer is in a solid state; and

subsequent to the cooling and prior to application of the binder strip to a stack to be bound, mechanically deforming a surface of the layer of adhesive to a degree such that curling of the binder strip along the transverse axis is substantially reduced.

2. (Currently Amended) An adhesive binder strip having reduced transverse curl made in accordance with the following method of Claim 1:

providing an elongated substrate having a longitudinal axis and transverse axis normal to the longitudinal axis;

applying a layer of molten, heated-activated adhesive over a surface of the substrate, substantially along a full length of the substrate along the longitudinal axis;

cooling the layer of molten adhesive so that the layer is in a solid state; and

subsequent to the cooling and prior to application of the binder strip to a stack to be bound, mechanically deforming a surface of the layer of adhesive to a degree such that curling of the binder strip along the transverse axis is substantially reduced.

3. (Cancelled) The method of Claim 1 wherein the mechanically deforming includes applying multiple grooves to the surface of the layer of adhesive.

4. (Currently Amended) ~~Aa~~ The adhesive binder strip made in accordance with the method of Claim 2 wherein the mechanically deforming includes applying multiple grooves to the surface of the layer of adhesive.

5. (Cancelled) The method of Claim 3 wherein the multiple grooves are applied in a direction substantially parallel to the longitudinal axis of the binder strip.

Rev. 02/14/01

PATENT

- 4 -

6. (Currently Amended) An adhesive binder strip for binding a stack of sheets comprising:  
an elongated substrate having a longitudinal axis and a transverse axis normal to the longitudinal axis; and  
a layer of heat activated adhesive disposed on a surface of the substrate substantially along a full length of the substrate, with the layer having an exposed surface containing mechanical deformities of a sufficient magnitude to substantially reduce curling of the binder strip along the longitudinal transverse axis.
7. (Original) The adhesive binder strip of Claim 6 wherein the mechanical deformities include a multiplicity of grooves formed in the exposed surface.
8. (Original) The adhesive binder strip of Claim 7 wherein the grooves extend at least 20% of the way through the total thickness of the adhesive layer.
9. (Original) The adhesive binder strip of Claim 8 wherein the grooves are disposed in directions substantially parallel to the longitudinal axis.
10. (Original) The adhesive binder strip of Claim 6 wherein the mechanical deformities include a multiplicity of punctures in the exposed surface.
11. (Cancelled) A method of binding a stack of sheets using a binding machine, said method comprising:  
providing an elongated substrate having a longitudinal axis and transverse axis normal to the longitudinal axis;  
applying a layer of molten, heated-activated adhesive over a surface of the substrate;  
cooling the layer of molten adhesive so that the adhesive layer is in a solid state;  
mechanically deforming an exposed surface of the layer to an extent such that curling of the substrate about the transverse axis is substantially reduced, thereby forming a binder strip; and  
subsequent to the mechanically deforming, applying the binder strip to a stack of sheets using a binding machine.

Rev. 02/14/01

PATENT

- 5 -

12. (Currently Amended) A binder strip applied to a stack of sheets using a binding machine and formed in accordance with the following method of Claim 11 comprising:

providing an elongated substrate having a longitudinal axis and transverse axis normal to the longitudinal axis;

applying a layer of molten, heated-activated adhesive over a surface of the substrate substantially a full length of the substrate along the longitudinal axis;

cooling the layer of molten adhesive so that the adhesive layer is in a solid state;

subsequent to the cooling, mechanically deforming an exposed surface of the layer to an extent such that curling of the substrate about the transverse axis is substantially reduced, thereby forming a binder strip; and

subsequent to the mechanically deforming, applying the binder strip to a stack of sheets using a binding machine.

13. (Cancelled) A method of making an adhesive binder strip having a reduced transverse curl, said method comprising:

providing an elongated substrate having a longitudinal axis and transverse axis normal to the longitudinal axis;

applying a layer of molten, heated-activated adhesive over a surface of the substrate;

cooling the layer of molten adhesive so that the adhesive layer is in a solid state; and

subsequent to the cooling, forming a multiplicity of grooves in an exposed surface of the adhesive layer.

14. (Currently Amended) A binder strip having reduced transverse curl and made in accordance with the following method of Claim 13 comprising:

providing an elongated substrate having a longitudinal axis and transverse axis normal to the longitudinal axis;

applying a layer of molten, heated-activated adhesive over a surface of the substrate substantially a full length of the substrate along the longitudinal axis;

cooling the layer of molten adhesive so that the adhesive layer is in a solid state; and

subsequent to the cooling, forming a multiplicity of grooves in an exposed surface of the adhesive layer.

Rev. 02/14/01

PATENT

- 6 -

15. (Cancelled) A method of making an adhesive binder strip having a reduced transverse curl, said method comprising:

providing an elongated substrate having a longitudinal axis and transverse axis normal to the longitudinal axis;

applying a layer of molten, heated-activated adhesive over a surface of the substrate;

cooling the layer of molten adhesive so that the adhesive layer is in a solid state; and

subsequent to the cooling, forming a multiplicity of punctures in an exposed surface of the adhesive layer.

16. (Cancelled) A binder strip made in accordance with the method of Claim 15.

17. (Cancelled) A method of making an adhesive binder strip having a reduced transverse curl, said method comprising:

providing an elongated substrate having a longitudinal axis and transverse axis normal to the longitudinal axis;

applying a layer of molten, heated-activated adhesive over a surface of the substrate;

cooling the layer of molten adhesive so that the adhesive layer is in a solid state; and

subsequent to the cooling, forming a multiplicity of grooves in an exposed surface of the adhesive layer, with the grooves extending at least 20% of the way through the thickness of the adhesive layer.

18. (Currently Amended) A binder strip having a reduced transverse curl and made in accordance with the following method of Claim 17 comprising:

providing an elongated substrate having a longitudinal axis and transverse axis normal to the longitudinal axis;

applying a layer of molten, heated-activated adhesive over a surface of the substrate, substantially along a full length of the substrate along the longitudinal axis;

cooling the layer of molten adhesive so that the adhesive layer is in a solid state; and

subsequent to the cooling, forming a multiplicity of grooves in an exposed surface of the adhesive layer, with the grooves extending at least 20% of the way through the thickness of the adhesive layer.

Rev. 02/14/01

**THIS PAGE BLANK (USPTO)**

PATENT

- 7 -

19. (Currently Amended) An adhesive binder strip for binding a stack of sheets comprising:  
an elongated substrate having a longitudinal axis and a transverse axis normal to the longitudinal axis; and

a layer of heat activated adhesive disposed on a surface of the substrate and extending substantially the full length of the substrate along the longitudinal axis, with the layer having a multiplicity of grooves formed in an exposed surface which extend at least 20% of the way through a thickness of the layer of adhesive.

20. (New) An adhesive binding member for binding an edge of a stack and having reduced transverse curl, said binding member made in accordance with the following method:

providing a substrate having an elongated region for receiving an adhesive, said elongated region extending substantially along a full length of the edge of a stack bound by the binding member, with said elongated region having a longitudinal axis and a transverse axis normal to the longitudinal axis;

applying a layer of molten, heated-activated adhesive over substantially all of the elongated region of the substrate;

cooling the layer of molten adhesive so that the layer is in a solid state; and

subsequent to the cooling and prior to application of the binder member to a stack to be bound, mechanically deforming a surface of the layer of adhesive to a degree such that curling of the binder member along the transverse axis is substantially reduced.

21. (New) The adhesive binding member of Claim 20 wherein the mechanically deforming includes applying multiple grooves to the surface of the layer of adhesive.

22. (New) An adhesive binding member for binding an edge of a stack of sheets comprising:  
a substrate having an elongated region for receiving an adhesive, said elongated region having a longitudinal axis and a transverse axis normal to the elongated axis, with the elongated region extending along substantially a full length of the edge of the stack after binding; and

a layer of heat activated adhesive disposed over substantially all of the elongated region, with the layer having an exposed surface containing mechanical deformities of

Rev. 02/14/01

PATENT

- 8 -

sufficient magnitude to substantially reduce curling of the binding member along the transverse axis with the mechanical deformities being created when the adhesive is in a substantially non-molten state.

23. (New) The adhesive binding member of Claim 22 wherein the mechanical deformities include a multiplicity of grooves formed in the exposed surface.

24. (New) The adhesive binding member of Claim 23 wherein the grooves extend at least 20% of the way through the total thickness of the adhesive layer.

25. (New) The adhesive binding member of Claim 24 wherein the grooves are disposed in directions substantially parallel to the longitudinal axis.

26. (New) The adhesive binder strip of Claim 22 wherein the mechanical deformities include a multiplicity of punctures in the exposed surface.

Respectfully submitted,

GIRARD & EQUITZ, LLP

Dated: August 25, 05

By: 

Philip A. Girard  
Reg. No. 28,848

Attorneys for Applicant(s)

Attorney Docket No. PRKR-4500

Rev. 02/14/01